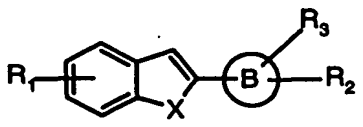
What is claimed is:

1. A method of treating or inhibiting disorders associated with the activation of large conductance calcium activated potassium channels, which comprises administering to a subject in need thereof an effective amount of a compound according to formula (I):



(I)

wherein:

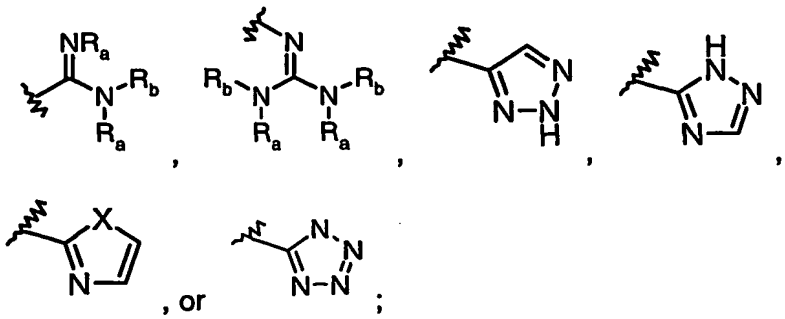
R_1 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, $CONR_aR_b$, and NR_aR_b;

X is NR_a, O, or S;

B is aryl or heterocycle;

R_2 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, $CONR_aR_b$, and NR_aR_b;

R_3 is COOH, $CONR_aR_b$, SO_3H, $SO_2NR_aR_b$, $CONR_aSO_2R_b$,



, or ;

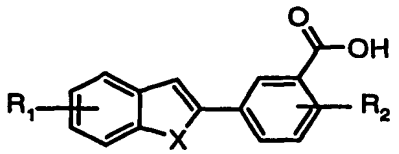
each R_a and R_b is independently selected from hydrogen, (C_{1-6})alkyl, aryl, heterocycle, (C_{1-6})alkyl-aryl, and (C_{1-6})alkyl-heterocycle;
or a pharmaceutically acceptable salt thereof.

2. A method according to claim 1 of relaxing bladder smooth muscle tissue through the activation of large conductance calcium activated potassium channels.

3. A method according to claim 2 of treating urinary incontinence or overactive bladder.

4. A pharmaceutical composition which comprises a compound according to claim 1 and a pharmaceutically acceptable carrier.

5. A compound according to formula (II)



(II)

wherein:
R_1 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, $CONR_aR_b$, and NR_aR_b;

X is NR_a, O, or S;

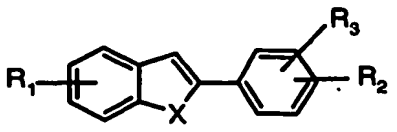
R_2 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, cyano, COR_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, NR_aR_b and CO_2R_c wherein R_c is aryl, (C_{1-6})-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, and (C_{1-6})alkyl;

each R_a and R_b is independently selected from hydrogen, aryl, (C_{1-6})-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, and (C_{1-6})alkyl;

or a pharmaceutically acceptable salt thereof, provided that the compound is not

4-methoxy-3-(benzofuran-2-yl)-benzoic acid or 3-(5,6-dichloro-1H-indol-2-yl)-benzoic acid.

6. A compound according to formula (III)



(III)

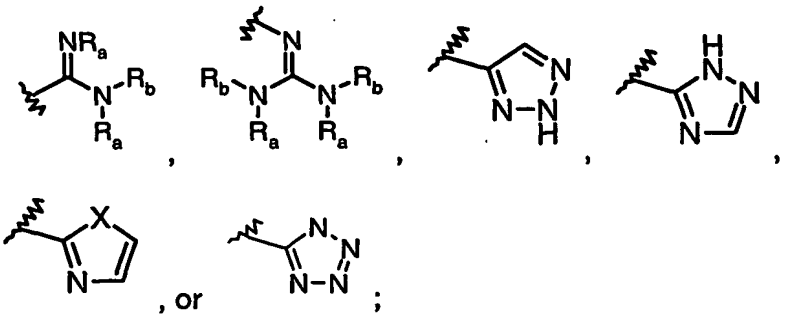
wherein:

R_1 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, trifluromethyl, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, $CONR_aR_b$, and NR_aR_b;

X is NR_a, O, or S;

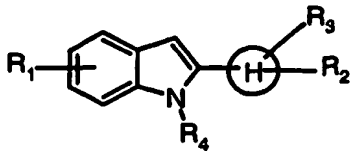
R_2 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, and NR_aR_b;

R_3 is SO_3H, $SO_2NR_aR_b$, $CONR_aSO_2R_b$,



each R_a and R_b is independently selected from hydrogen, aryl, (C_{1-6})-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, and (C_{1-6})alkyl; or a pharmaceutically acceptable salt thereof.

7. A compound according to formula (IV)



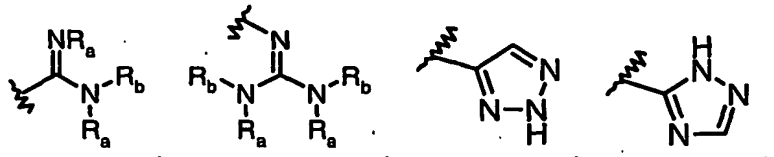
(IV)

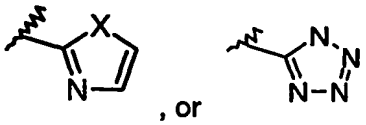
wherein:

R_1 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, $CONR_aR_b$, and NR_aR_b;

R_2 is absent or represents up to three substituents independently selected from (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{3-6})cycloalkyl, aryl, (C_{1-6})alkyl-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, cyano, COR_a, CO_2R_a, SO_3H, (C_{1-6})alkyl-CO_2-(C_{1-6})alkyl, and NR_aR_b;

R_3 is COOH, SO_3H, $SO_2NR_aR_b$, $CONR_aSO_2R_b$,





, or ;

R_4 hydrogen, aryl, (C_{1-6})-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, and (C_{1-6})alkyl;

H is thiophene, furan, or pyridine.

each R_a and R_b is independently selected from hydrogen, aryl, (C_{1-6})-aryl, heterocycle, (C_{1-6})alkyl-heterocycle, and (C_{1-6})alkyl; or a pharmaceutically acceptable salt thereof.

8. A compound which is:

5-(5,6-Dichloro-1H-indol-2-yl)-furan-2-carboxylic acid;

3-(5,6-Dimethyl-1H-indol-2-yl)-benzoic acid;

3-(5,6-Dichloro-1H-indol-2-yl)-4-methoxy-benzoic acid;

5-(5,6-Dichloro-1H-indol-2-yl)-2-chloro-benzoic acid;

3-(5,6-Dichloro-1-methyl-indol-2-yl)-benzoic acid;

5-(5,6-Dimethyl-1H-indol-2-yl)-2-chloro-benzoic acid;

3-(5,6-Dimethyl-1H-indol-2-yl)-4-methoxy-benzoic acid;

3-(5-Chloro-benzofuran-2-yl)-benzoic acid;

3-(5,6-Dichloro-benzofuran-2-yl)-benzoic acid;

3-(Benzofuran-2-yl)-benzoic acid; or

3-(5,6-Difluoro-benzofuran-2-yl)-benzoic acid; or a pharmaceutically acceptable salt thereof.